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United States Department of the Interior
Fish and Wildlife Service

Wildlife Leaflet 200

Washington, D. C.

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October 1941

ANNOTATED LIST AND INDEX OF WILDLIFE LEAFLETS 101 TO 200^{1/}

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Office of the Director

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Introduction

Leaflet BS-100 listed, abstracted, and indexed the forerunners of its series published in the years 1935 to 1937. The present number (200) performs a similar service for those appearing from January 1938 to September 1941. During this second period, the Biological Survey was transferred from the Department of Agriculture to the Department of the Interior and merged with the Bureau of Fisheries, transferred to that Department from the Department of Commerce, to form the Fish and Wildlife Service. Accompanying these shifts were certain changes in the heading for this series of leaflets. Numbers 101 to 140 continued the series headed "Wildlife Research and Management Leaflet BS-[]"; numbers 141 to 165 were headed "Wildlife Leaflet BS-[]"; and those from 166 on simply "Wildlife Leaflet []".

These leaflets are prepared for use in correspondence and for the benefit of employes and cooperators of the Service. Requests for copies should be for definite numbers needed rather than for runs or sets.

^{1/}Leaflets Nos. 101 to 140 were designated Wildlife Research and Management Leaflets BS-[]; Nos. 141 to 165, Wildlife Leaflet BS-[].

Annotated List

- BS-101. Principles of breeding rabbits. By George S. Templeton. 6 pp., 1 pl., January 1938.
Description of fundamental factors in mating and suggestions as to age to breed, breeding schedule, making matings, factors that prevent conception and remedies, inbreeding, and eliminating woolly fur.
- BS-102. Salt requirements of rabbits. By George S. Templeton. 1 p., January 1938.
Report on an experiment on the salt requirements of bucks and of does with litters and suggestions as to salting. A sixth of a pound of salt added to each 100 pounds of food concentrates is a satisfactory ration.
- BS-103. Facts about snakes. Prepared in the Section of Food Habits, Division of Wildlife Research. 9 pp., February 1938. (Supersedes Leaflet Bi-855.)
Popular misconceptions and myths about snakes are discussed; their general habits, hibernation, skin-shedding, and economic value described; and suggestions made as to snake-proofing buildings and eradicating snakes.
- BS-104. The status of wildlife research: 1937. By W. L. McAtee. 30 pp., February 1938.
Summary of research projects by Federal, State, and other agencies including the number of projects and synopsis of them according to subjects.
- BS-105. The Federal aid to wildlife restoration act. By Albert M. Day. 4 pp., February 1938.
Explanation of fundamental provisions of the act, which is directed toward restoration of natural environment, and of the appropriations authorized. Functions of the Biological Survey in administering the law; kind of projects likely to receive approval; responsibility of the States for maintenance; prospective benefits.
- BS-106. Report on extension work in wildlife conservation to December 1937. By I. T. Bode [abstracted by Leo K. Couch]. 7 pp., March 1938.
Exposition of the general interest in wildlife conservation; statement of needs for wildlife extension program; requirements for informational material; work accomplished and plans for 1938; and suggestions for a continuation program.
- BS-107. Planning for wildlife management--an outline. Prepared in the Section of Wildlife Surveys, Division of Wildlife Research. 5 pp., March 1938.
Outline of things that should be considered while making a plan for wildlife management; survey of resources, including condition of existing habitat, present wildlife population, and limiting factors; management objectives, as to formulate and correlate plans for better land utilization for wildlife, to insure

proper utilization of wildlife, to assure protection of personal and property rights, and to provide returns to the community and to individuals; also suggestions as to sources of supplemental information.

- BS-108. History and significance of American wildlife. By H. P. Sheldon. 8 pp., March 1938.

Prepared for use in schools, this leaflet is organized under the following heads: original wealth in wildlife, abundance unimpaired by Indians, exploitation by white men, influence of wildlife on colonization and settlement, early traffic in wildlife and its products, exploitation era closing, wildlife management the remedy, restoration a land-use problem.

- BS-109. Fort Niobrara Game Preserve, Nebraska. By Clara Ruth. 7 pp., 2 pls., April 1938.

Location and purpose; history; occupants as big game, Texas longhorns, smaller mammals, and birds; improvements; miscellaneous features. List of 10 other refuges maintained primarily for big game animals.

- BS-110. Status of eelgrass (Zostera marina) on the North Atlantic Coast, February 1938. By Clarence Cottam. 7 pp., April 1938.

Review of previous accounts of the eelgrass wasting disease referring to 8 articles cited in a terminal bibliography. Description of conditions by regions; summary, not optimistic; and account of experimental transplantings from the West to the East Coast.

- BS-111. The waterfowl situation: 1937-38. Prepared in the Section of Distribution and Migration of Birds, Division of Wildlife Research. 10 pp., 2 tables, 1 map, April 1938.

Summary of observations by the Federal flyway biologists (with map showing courses of their expeditions) on the status of the North American wild fowl population. Moderately optimistic. Reports from cooperating observers (tabulated) indicate improvement.

- BS-112. Tankage and livermeal as a summer feed for adult minks. By Charles F. Bassett. 4 pp., 2 tables, May 1938.

Report on substitution of these products for raw meat, including description of the experiment and its results and tabulation of the rations used. The substitution proved unsatisfactory.

- BS-113. European and American methods of rat control. By E. M. Mills. 6 pp., May 1938.

Descriptions of rat control with special reference to the laws affecting it and of extensive campaigns in Denmark, England, Germany, and France. General account also of rat control and its history in the United States.

- BS-114. Care of rabbits during warm weather. By George S. Templeton. 2 pp., 3 figs., May 1938.

Provision of adequate supply of fresh water; protection from heat by water-evaporating devices, ventilation of hutches, and a cooling container for the young.

- BS-115. Cultural and other methods for the control of injurious wildlife. By Donald A. Spencer. 6 pp., June 1938.

Cultural methods are those involving modification of agricultural practices; examples are given. Defensive control is discussed under the heads of scarecrows, repellents, fences, and transfer of offending animals. Aggressive methods are illustrated by the New England field mouse control campaign which is fully described, particularly as to the safeguards employed.

- BS-116. Suggestions for control of coccidiosis in rabbits. By Edward L. Vail. 1 p., June 1938.

Description of symptoms of coccidiosis and of method of positive diagnosis; infection occurs only through ingestion of droppings; wire-bottomed hutches are recommended, and other suggestions as to sanitation made.

- BS-117. Protecting orchard trees from deer. By E. M. Mills. 5 pp., 1 pl., June 1938.

Notes on the habits of deer calling for control, and on repellent devices and substances. These are described under the captions: scaring devices, sprays, fences (electrified and other), asafetida, naphthalene, flashguns, tar-paper, cones, and traps.

- BS-118. Abstract of fur laws, 1938-39. Compiled by Frank G. Grimes. 35 pp., September 1938.

Quotations from the Federal Lacey Act bearing on fur law violations. Abstract of provisions as to open and closed seasons, possession and sale, shipment and export of furs, and licenses for the United States, Canadian Provinces, and Newfoundland.

- BS-119. The coordination of mosquito control with wildlife conservation. By Clarence Cottam. 6 pp., September 1938.

This leaflet points out the special interest of the Biological Survey in wildlife, and the qualifications of its representatives for judging the effects of mosquito-control operations. Some of the latter are detrimental to wildlife, an important national resource that must be maintained. It is held that there are satisfactory means of mosquito control other than simple ditching and that being less injurious to wildlife they should be adopted. Biological control seems promising and should be further studied and tested. Instances of the coordination of mosquito control and wildlife conservation are cited, and suggestions made of desirable practices in that direction. Excessive burning of marshes is condemned. "Mosquito-control workers and wildlife conservationists in the future should more closely coordinate their activities, so as to accomplish the purpose of each without jeopardizing the interests of either."

- BS-120. Botulism, a recurring hazard to waterfowl. By E. R. Kalmbach. 8 pp., September 1938.

Review of the history of knowledge of the subject and summary of information accruing since the author's comprehensive report in 1934. Outbreaks since 1932 in the United States, Canada, and

Australia are reported. A final section discusses safeguards for the future. Bibliography of 5 titles.

- BS-121. Two home-made traps for English sparrows. Prepared in the Section of Food Habits, Division of Wildlife Research. 6 pp., 3 pls., October 1938.

Brief summary of information as to the introduction, spread, and economic status of the species. Methods of preventing damage especially in reducing numbers by trapping. Traps are described and illustrated.

- BS-122. Big-game inventory of the United States, 1937. Compiled in the Section of Wildlife Surveys, Division of Wildlife Research. 13 pp., 17 tables, January 1939.

Compilation of information from a variety of sources of which the Federal land-administrative agencies were most productive. Data given for 15 kinds of animals in the wild or in no more than semi-confinement, e.g., the bison. Comparisons made when previous figures were available indicate increases for deer, elk, antelope, and black bear. The data are tabulated by States.

- BS-123. Crow damage to fall grain crops in Oklahoma in 1937. By Ralph H. Imler and E. R. Kalmbach. 15 pp., 1 map, 3 tables, January 1939.

Based on studies made at intervals since 1920, report is made on the distribution and abundance of crows and on damage done, especially to grain. Responses to a questionnaire on these points from more than 1,100 farmers are summarized and the results compared with those of field observations. Annual loss in the county most thoroughly studied exceeded \$18,000. Further investigation is advised.

- BS-124. Factors in nesting losses of the California valley quail. By E. E. Horn. 7 pp., January 1939.

California ground squirrels are the most serious check upon quail breeding; other inimical factors, and management are discussed. Bibliography of 7 titles.

- BS-125. Natural plantings for attracting waterfowl to marsh and other water areas. 5 pp., January 1939.

Plants are recommended for improving: (1) Areas characterized by muddy, fluctuating water (as in the Mississippi Valley); and (2) coastal marshes and marshland ponds. Correspondence is invited both as to these and other areas.

- BS-126. History and significance of American wildlife: II. By H. F. Sheldon. 7 pp., February 1939.

A statement for educational use, commenting on the rapid exploitation of American natural resources, present-day recognition of the need of conservation, planning wildlife restoration in the light of research, progress made in that direction and also in protective legislation, and restoration as a government function.

BS-127. An efficient trap for the fox ranch. By Charles F. Bassett. 2 pp., 3 pls., March 1939.

Trapping alive without injury is possible with a recently devised trap that is described and illustrated.

BS-128. A feeder for foxes. By Charles F. Bassett. 2 pp., 1 pl., March 1939.

Description, plans, and specifications of the feeder found most satisfactory at the U. S. Fur Animal Experiment Station, Saratoga Springs, N. Y., with notes on its use and care.

BS-129. Cooperative wildlife-management research, 1938. Prepared in the Section of Wildlife Surveys, Division of Wildlife Research. 4 pp., 3 tables, March 1939.

Locations, leaders, demonstration areas, subjects of study, and students concerned in 11 projects. The units have contributed to the protection and management of wildlife, and to the training of men for conservation work.

BS-130. Seasonal fox rations and quantities to feed. By Charles F. Bassett. 3 pp., 2 tables, April 1939.

Permissible variations in rations, with especial reference to the meat content, with suggestions as to kinds, quantities, and seasons for feeding; notes also on dietary requirements of males, females, and weaned pups.

BS-131. Suggestions on attracting birds, with reference to available literature. 5 pp., 1 map, April 1939. (Supersedes Leaflet BS-8.)

Brief suggestions, with references to available official and current unofficial literature (12 titles of each) on protection, nesting facilities, and water and food supplies.

BS-132. Some California wildlife-forest relationships. By E. E. Horn. 5 pp., April 1939.

Effects of forest-wildlife interactions; type of forest affects wildlife and vice versa; results of California studies.

BS-133. A preliminary investigation of the food habits of the mourning dove in Alabama. By Walter Rosene, Jr. 10 pp., 2 tables, April 1939.

Analyses of 287 stomach contents presented in tables and text. More than 99 percent of the food was seeds of which those of grasses, especially cultivated grains, were most important (55 percent). Other leading sources of food were: Pokeweed, chickweed, legumes, doveweeds, evening primrose, and ragwoods. Animal food was insignificant.

BS-134. A summary of the gray squirrel investigation in southeastern Ohio. By Floyd B. Chapman. 9 pp., 4 tables, April 1939.

Results cited as to weights, sex ratios, age-class groups, dens and leaf nests, mating period and litters, and parasites and diseases. There are also reports on population studies and on analysis of squirrel hunting; recommendations as to management; and bibliography of 12 titles.

- BS-135. Personnel in Federal game-law enforcement. By W. E. Crouch and C. A. Leichhardt. 8 pp., May 1939.
Job specifications, salaries, entrance requirements, duties; qualifications as to physique, education, experience, and attitude.
- BS-136. The waterfowl situation; 1938-39. Prepared in the Section of Distribution and Migration of Birds, Division of Wildlife Research. 18 pp., 1 graph, 1 map, 2 tables, May 1939.
Comparison of reports on the volume of the flights in both spring and fall migrations of 1937 and 1938. Summary of field surveys of the flyways and wintering grounds. Results of the annual January inventory. Remarks on bag limits and total kill. The waterfowl population continues to increase.
- BS-137. Fall and winter food habits of deer in northeastern Minnesota. By Shaler E. Aldous and Clarence F. Smith. 10 pp., 3 pls., 2 tables, June 1939.
Discussion of the food supply and its utilization, with report on 72 stomach analyses. The food items and their frequency of occurrence in stomachs are tabulated. Availability of foods determined by field observations indicates decline in the winter carrying-capacity of the range studied. Management to correct the situation is suggested.
- BS-138. Sperm studies as a guide in fur-animal breeding practice. By Robert K. Enders. 3 pp., June 1939.
Description of equipment and methods used and interpretation of the findings. The practice may be used to reduce the number of failures in impregnation.
- BS-139. Rabbit-pen construction in relation to sore hocks. By George S. Tompleton. 2 pp., June 1939.
Suggestions as to flooring and management that will reduce the malady and for treatment of affected animals.
- BS-140. A survey of the annual fur catch of the United States. Prepared in the Section of Fur Resources, Division of Wildlife Research. 19 pp., 40 tables, June 1939.
Total catch by species for 1937-38 as reported by conservation departments of 27 States; also detailed for Alaska and numerous States for various years.
- BS-141. Protecting blueberries from damage by herring gulls. By Robert C. McClanahan. 4 pp., August 1939.
Habits of the gulls in Washington and Hancock Counties, Maine; causing damage to blueberries is restricted to a small proportion of the gull population; suggestions as to control by frightening devices and modification of cultural practices.
- BS-142. Big-game inventory of the United States. Compiled in the Section of Wildlife Surveys, Division of Wildlife Research. 11 pp., 17 tables, August 1939.

Second inventory based largely on estimates yet "far from satisfactory." In time, trends may be reliably indicated. Notes on deer over-populations; and increase in their species in general as well as that of antelopes and black bears. Mountain sheep still decreasing. Tabulation of the estimates of 15 groups by States and according to land ownership and control. Also totals by States; grand total nearly 6 millions.

- BS-143. Suggestions for the control of vagrant domestic pigeons. Prepared in the Section of Food Habits, Division of Wildlife Research. 4 pp., August 1939.

Status of pigeons as bearing on the legality of aggressive actions against them; suggestions for control by excluding, frightening, trapping, shooting, poisoning, and gassing.

- BS-144. Raising deer in captivity. Prepared in the Section of Wildlife Surveys, Division of Wildlife Research. 6 pp., August 1939. (Supersedes Leaflet Bi-1274.)

Enclosures and food requirements; notes on characteristics of white-tailed, mule, and black-tailed deer; list of valuable food plants; bibliography of 27 titles.

- BS-145. Birdbanding. By Frederick C. Lincoln. 5 pp., October 1939. (Supersedes Leaflet BS-53.)

Notes on the history of birdbanding; organization in this country; qualifications of cooperators; suggestions as to avoiding injury to birds; description of bands and traps; and summary as to value of the work.

- BS-146. Lake Mattamuskeet Wildlife Refuge. Prepared in the Division of Wildlife Refuges. 2 pp., October 1939.

History and description of this 50,000-acre reservation in North Carolina; notes on hunting and fishing privileges, and on the principal waterfowl of the refuge.

- BS-147. Abstract of fur laws, 1939-40. Compiled by Frank G. Grimes. 37 pp., October 1939.

Revision of BS-118 to fit the year specified.

- BS-148. Status of the American bison in the United States and Alaska, 1939. Compiled in the Section of Wildlife Surveys, Division of Wildlife Research. 10 pp., 1 table, December 1939.

Number of the animals in the United States and Alaska, 5,029 (1939), an increase of 579 over the 1934 estimate. A 5-page tabulation shows the location and ownership of herds, the number of males, females, and calves they included, and State, United States, and Alaska totals. Bibliography of 50 titles.

- BS-149. Protecting field crops from waterfowl damage by means of reflectors and revolving beacons. By F. M. Uhler and Stephen Creech. 5 pp., 1 pl., November 1939.

Account of experiments in protecting buckwheat, rice, and lettuce by means of spinning reflectors and revolving beacons,

construction and use of which are described. The plate illustrates details of the devices.

- BS-150. Suggestions for bird field study. By May Thatcher Cooke. 7 pp., January 1940. (Supersedes Leaflet BS-76.)
Popularity of the study; availability of aids; time to begin; equipment; where and when to go; field identifications; note keeping; significance of bird study; organizations; list of helpful books and pictures; addresses of their publishers, and prices.
- BS-151. Raising chinchillas in captivity. Prepared in the Section of Fur Resources, Division of Wildlife Research. 3 pp., February 1940.
Description of the chinchilla and its native habitat; notes on importations into the United States; and hints on feeding, breeding, pens, and dens; value of the fur.
- BS-152. Suggested action program for sportsmen's organizations. Prepared in Division of Wildlife Research. 5 pp., February 1940.
Opportunities for cooperation in educational programs, in improving environment for wildlife, in restocking operations, in emergency winter feeding, and in the activities of State and Federal control and law enforcement programs.
- BS-153. The Biological Survey mammal collection. Prepared in the Section of Wildlife Surveys, Division of Wildlife Research. 4 pp., 1 pl., February 1940.
Brief history of the Biological Survey; notes of interest on the mammal collection which contains 1,513 type specimens; brief accounts of some of the expeditions that contributed to the collection and of investigations based upon it; housing and care of the collection.
- BS-154. Flora of the Patuxent Research Refuge, Maryland. By Neil Hotchkiss. 34 pp., 1 map, May 1940.
Description of the refuge; ecology of its vegetation; and annotated list of 706 species of flowering plants and ferns collected there.
- BS-155. Raising mealworms. By Franklin H. May. 2 pp., March 1940. (Supersedes Leaflet Bi-?)
Use of mealworms for feeding captive birds; equipment and methods of rearing; list of dealers.
- BS-156. Ornamental woody plants attractive to birds. By Myer Katz. 18 pp., March 1940.
General considerations as to attracting birds; references to available publications; and alphabetical list of the more important genera of woody plants with notes on their ornamental value and their utilization by birds.
- BS-157. Sullys Hill National Game Preserve, North Dakota. Prepared in the Division of Wildlife Refuges. 4 pp., 2 pls., April 1940. (Supersedes Leaflet BS-61.)

This preserve has small exhibition herds of big game and also functions as a bird refuge. Its history since 1904, when first established, is sketched and the historic features of the region are called to attention. A briefly annotated list of 12 other big game reservations is included.

- BS-158. Original and present breeding ranges of certain game birds in the United States. By Robert C. McClanahan. 2 pp. mimeographed, and 37 maps multilithed, 21 pp. in all, April 1940.

One map shows the location of national wildlife refuges in the United States. The other 36 delineate the original and present ranges of as many species, and indicate the refuges of special value to them. Only the black duck shows natural extension of range, similar gains for 4 species of quails being due to transplanting.

- BS-159. The chukar and Hungarian partridges in America. By Clarence Cottam, Arnold L. Nelson, and Lawrence W. Saylor. 6 pp., 2 tables, April 1940.

Notes on the introduction and present status of these two species, indexed by States. The chukar is reported succeeding in 7 States and the Hungarian partridge in 19.

- BS-160. Wildlife in land planning. By W. L. McAtee. 6 pp., April 1940. (Supersedes Leaflet BS-71.)

Value of wildlife; wildlife protection; unfavorable alteration of environment; restoration of environment; allotment of land to wildlife; management necessary; management in relation to land use; value of wildlife management.

- BS-161. Wildlife technology. By W. L. McAtee. 5 pp., May 1940. (Supersedes Leaflet BS-67.)

Origin and present status of wildlife technology; identity, range, and migration techniques; food and cover techniques; wildlife technology in conservation.

- BS-162. Birds as a factor in controlling insect depredations. By Clarence Cottam and Francis M. Uhler. 6 pp., May 1940.

Value of birds in the operation of natural balance; their achieving actual control of destructive insects is local; a number of recent instances are cited.

- BS-163. Common salt as a curative for cannibalism among game birds in captivity. By Ralph B. Nestler. 2 pp., June 1940.

Addition of 3-3 percent of salt to the diet stopped toe-picking among adult bob-whites in 24 hours; 5-6 percent terminated fighting.

- BS-164. Research in the administration of Federal refuges. By E. R. Kalmbach. 7 pp., June 1940.

Calls attention to Federal obligations imposed by treaties and legislation for the protection of waterfowl and to the desirability of research as a basis for management. Allusion is made to

studies of aquatic plants but most of the leaflet is devoted to an account of work with predators in relation to nesting waterfowl. Control as thus far carried on is regarded as part of the experimental work and the policy of doing the least necessary to optimum care of the protected birds is recommended.

- BS-165. The status of migratory game birds: 1939-40. Prepared in the Section of Distribution and Migration of Birds, Division of Wildlife Research. 22 pp., June 1940.

Annual report on abundance of the birds according to the flyways and migrations, with special sections on the January inventory, on crippling and other indirect losses, natural enemies, and upon the woodcock, mourning dove, and 5 other migratory species treated as game. The ducks and geese as a whole are believed to have increased about 2-1/2-fold since 1935. "The mallard and pintail show the largest gains, that for the canvasback is considered satisfactory, but little change is detected in the status of the redhead. A slight decrease is recorded for the black duck. Canada geese also made a gratifying gain, although much of this was lost through excessive shooting. During January 1940 adverse weather conditions in the Southeast, coupled with legal hunting, made serious inroads into the numbers of woodcocks and mourning doves, with the result that the numerical strength of both species is much below that of 1939. Measures to restrict the kill during the forthcoming season are definitely indicated. The continued status of the white-winged dove as a game species is open to serious question, not only because of improper management in harvesting the crop but also of natural factors that endanger the stock. So far as can be determined, the status of the band-tailed pigeon and the Wilson's snipe is satisfactory for the present year, but both species must be watched to guard against undue depletion."

166. Infectious myxomatosis of domestic rabbits. (Mosquito Disease; Big-head disease). By F. D. McKenney and E. L. Vail. 2 pp., July 1940. (Supersedes Leaflet BS-89.)

Symptoms, transmission, and mortality of the disease; post-mortem appearances; control and prevention.

167. Grubs in minks. By J. E. Shillinger. 2 pp., September 1940.

Larvae of a flesh fly that penetrate the skin and devour the flesh of young minks; treatment of wounds; screening out the flies is the best means of prevention.

168. The digestibility of animal products and cereals by minks. By J. K. Loosli, S. E. Smith, and L. A. Maynard. 5 pp., 3 tables, September 1940.

Report on 13 diets, with analyses of their nutritional contents and digestibility coefficients.

169. Mink breeding--elementary principles. By Robert K. Enders. 4 pp., 2 figs., August 1940.

Description and diagrammatic illustrations of the female reproductive system; ovulation, fertilization; recommendations as to pairing the animals and determining whether impregnation has occurred.

170. The annual fur catch of the United States. Prepared in the Section of Fur Resources, Division of Wildlife Research. 21 pp., 40 tables, October 1940.
Compilation of data of varying degrees of completeness from Alaska and 39 States, in most instances representing more than one year.
171. The Java sparrow. Compiled by Phoebe Knappen. 8 pp., 1 table, October 1940.
As a cage bird; common and scientific names; distribution; description; color forms; hybrids; care, especially feeding; breeding; importation.
172. Suggestions for combating objectionable roosts of birds with special reference to those of starlings. By E. R. Kalmbach. 18 pp., 1 pl., December 1940. (Supersedes Leaflet BS-81.)
History and status of the starling in America; description of its roosting habits, their objectionable features, and means of control, including screening, eliminating roosting lodges, trimming trees, and frightening the birds, and also shooting, trapping, gassing, and poisoning. Six references to cognate articles.
173. Fryer rabbit production. By George S. Tompiston. 10 pp., 2 pls., 2 tables, October 1940.
Suggestions as to the most suitable breeds, and their feeding and breeding. Formulas for rations and description and illustrations of self-feeders are featured.
174. Abstract of fur laws, 1940-41. Compiled by Frank G. Grimes. 39 pp., October 1940.
Revision of BS-118 to fit the year specified.
175. Big-game inventory of the United States, 1939. Compiled in the Section of Wildlife Surveys, Division of Wildlife Research. 11 pp., 17 tables, November 1940.
Third inventory; see BS-122 and BS-142. Tabulations for 13 species according to States, for 15 according to ownership or control of their ranges, and summary for 14 species. Total nearly six millions.
176. Animal and plant resources of Alaska. By L. J. Palmer. 12 pp., January 1941.
General account of Alaska as a home for wildlife, its fauna and flora, depletion of wildlife, importance of this resource, and the need for management, with notes on the present administration of wildlife and upon investigations in progress.
177. Horse meat for fur farms: Its chemical composition. By Sedgwick E. Smith and Charles F. Bassett. 7 pp., 5 tables, March 1941.
Analyses as to nutritional components.

178. Inheritance of degree of silvering in foxes. By Chas. E. Kellogg. 8 pp., 1 fig., 3 tables, March 1941.
Description of silvering; full silver pelts in greatest demand; data on 638 matings and their results in the improvement of silvering; possible genetic explanation.
179. National wildlife refuges administered by the Fish and Wildlife Service. Compiled in the Division of Wildlife Refuges. 8 pp., March 1941. (Supersedes Leaflet BS-16 and revisions thereof.)
Tabulation arranged by States and Territories, giving the name, location, date of establishment, and acreage of each of the refuges, and notes on the principal species they protect. The total number is 267 and acreage, 13,740,304.
180. Aids for bird study. Prepared in the Division of Wildlife Research. 9 pp., March 1941. (Supersedes Leaflet BS-2.)
A bibliography of available official publications on birds and also of commercially published books on identification, distribution, and habits of birds, and on the special subjects of bird-banding, economic ornithology, game birds and game management, flight, life history, migration, oology, photography, song, taxidermy, and territorialism. Names and places of publication of ornithological magazines also are given and the addresses of sources of educational leaflets, colored pictures, and charts, bird lectures, lantern slides and motion pictures, field glasses, telescopes, and taxidermist's and naturalist's supplies. The names of the principal ornithological societies and the addresses of officers also are provided.
181. The control of skunks. By Dorr D. Green and Ernest M. Mills. 4 pp., March 1941.
Habits; nuisance and damage attributable to skunks; and signs of their presence. Skunks are mostly beneficial to man but in special circumstances require control. Directions are given for trapping and disposing of the animals.
182. Some publications of interest to upland game bird breeders. Compiled in the Section of Food Habits, Division of Wildlife Research. 7 pp., March 1941. (Supersedes Leaflet Bi-203, in part.)
Bibliography of available official documents and of other pertinent books, pamphlets, and periodicals, both American and foreign, with the addresses of their publishers.
183. Some publications of interest to waterfowl breeders. Prepared in the Section of Food Habits, Division of Wildlife Research. 4 pp., March 1941. (Supersedes Leaflet Bi-203, in part.)
Bibliography of available official documents and of other pertinent books and periodicals, both American and foreign, with the addresses of their publishers.
184. Publications on rabbits, cavies, and other stock. Compiled in the Section of Fur Resources, Division of Wildlife Research. 2 pp., April 1941. (Supersedes Leaflet BS-56.)
Bibliography of available official documents and list of periodicals (one foreign) with the addresses of their publishers.

185. The preparation of blood smears and tissue impressions for laboratory study. By Don R. Coburn. 2 pp., 1 pl., April 1941.
Directions for, and illustrations of, an approved method.
186. Available publications on wildlife. Compiled in the Division of Public Relations. 9 pp., April 1941. (Supersedes Leaflet BS-4 and revisions thereof.)
Latest revision of the list of available publications of the Fish and Wildlife Service, excluding those relating to fishes. Instructions for obtaining them.
187. Hints on the care of opossums. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., May 1941.
Description; notes on distribution and habitat; breeding; pens and nest boxes; feeding.
188. Raising otters in captivity. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., May 1941. (Supersedes Leaflet BS-75.)
Description of the animal and its habits; notes on food, breeding, and enclosures.
189. Publications on the selection and care of furs. Prepared in the Section of Fur Resources, Division of Wildlife Research. 1 p., May 1941. (Supersedes Leaflet Bi-1453.)
Bibliography of books and magazines, with addresses of their publishers.
190. Directions for destroying crawfishes. Prepared in the Division of Predator and Rodent Control. 2 pp., May 1941.
Directions for fumigating burrows with carbon disulfide and treating them with a coal-tar and creosote cattle dip.
191. Mink raising. Prepared in the Section of Fur Resources, Division of Wildlife Research. 10 pp., May 1941. (Supersedes Leaflet BS-82.)
History and status of the industry; suggestions as to individual pens, colony houses, nest boxes, and other equipment; selection of stock; feeds and feeding; breeding; sanitation; and pelting. List of trade magazines, with addresses of their publishers.
192. Selected publications on waterfowl and gallinaceous game birds. Compiled by Myer Katz. 42 pp., July 1941.
Bibliography of official and other bulletins, books, and periodicals, American and foreign, with addresses of their publishers. There is also a list of 8 finding indexes and abstracting publications and a subject index of the leaflet itself.
193. Directions for collecting materials for food habits studies. Prepared in the Section of Food Habits, Division of Wildlife Research. 7 pp., 1 pl., July 1941. (Supersedes Leaflet BS-29.)
Remarks on the requirements of good collecting; statement of equipment needed, and suggestions as to the preparation, labelling, and preservation of material representing different classes of verte-

brates. Use of the tags and schedules provided by the Service and directions for shipping.

194. Publications on trapping. Prepared in the Division of Predator and Rodent Control. 2 pp., July 1941. (Supersedes Leaflet Bi-389.)
Bibliography of available official documents and other pertinent publications, both American and foreign, with the addresses of their publishers.
195. Directions for poisoning thirteen-striped ground squirrels. Prepared in the Division of Predator and Rodent Control. 2 pp., July 1951. (Supersedes Leaflet Bi-1162.)
Formula for baits and directions for their use.
196. The status of migratory game birds: 1940-41. Prepared in the Section of Distribution and Migration of Birds, Division of Wildlife Research. 28 pp., 1 map, 3 tables, July 1941.
Account of the investigations of the flyway biologists on breeding and wintering grounds, and of the January inventory of waterfowl; discussion of the status of certain shore birds and doves, and of rails and coots. The least optimistic of this series of reports. Final conclusion: "Apparently there must be renewed emphasis upon conservation measures."
197. Directions for controlling tree squirrels. Prepared in the Division of Predator and Rodent Control. 2 pp., August 1941.
Cautions as to legal protection of squirrels; when control is necessary and authorized, it may be accomplished by repellents, traps, and guns, the use of which is discussed.
198. Raising muskrats. Prepared in the Section of Fur Resources, Division of Wildlife Research. 2 pp., August 1941. (Supersedes Leaflet BS-35.)
Muskrats cannot be profitably raised in small pens. Directions are given for marsh management, also brief notes on the breeding habits of the animals. The taking of only prime pelts is urged.
199. Abstract of fur laws, 1941-42. Compiled in the Section of Fur Resources, Division of Wildlife Research. 40 pp., September 1941.
Revision of BS-118 to fit the year specified. Addresses are given of officials from whom information on fur laws can be obtained in all of the commonwealths concerned.
200. Annotated list and index of Wildlife Leaflets 101 to 200. By W. L. McAtee. 20 pp., October 1941.
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